21. ETIELIA ZINCKENELLA TREITSCHKE (LEPIDOPTERA: PHYCITIDAE) AS A POD BORER OF LENTIL IN THE PUNJAB

Etiella zinckenella T. was first reported in India in the beginning of this century as a pest of horse gram (Dolichos biflorus Linn.), cowpea (Vigna catiang Walh.), red gram (Cajanus cajan Sprengl.) and sannhemp (Crotalaria juncea L.) (Fletcher 1914). Mitra (1944), Singh & Sohi (1957) reported it as a pest of pea pods.

Recently the insect was observed doing serious damage to the pods of lentil (*Lens esculenta* Moench.) at the Punjab Agricultural University Farm, Ludhiana, and this is the first record of damage done by this insect to lentil crop in India.

The adults of *E. zinckenella* are greyish brown with distinct pale white band along the coastal margin of the fore-wing and a transverse ridge of raised scales near the base. The hind wing is semi-transparent and light in colour. The eggs are laid at the time of flowering near the calyx and on hatching the larvae bore into the pods and feed on the developing grains. Usually one larva is present per pod. A single larva attacks a number of pods before it is full-grown. The larvae are green in colour and turn pinkish-brown near maturity. Full grown larva measures about 1·0-1·25 cm. After attaining maturity, the larvae leave the pods, enter the soil and spin silken cocoons about 2 cm. to 3 cm. deep in the soil. The cocoons are covered with particles of soil.

Maximum damage to the lentil crop was done when the pods were nearing maturity. All the seeds in the infested pods were destroyed and such pods contained small larval faecal pellets and were found webbed together in clusters. Twelve to fifteen per cent pods of the crop was damaged by this insect. The larvae were parasitised by *Bracon* sp., *Tetrastichus* sp. and *Pteromalid* sp.

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